

*Comments and/or questions for the
Wastewater Plan Update can be sent to:
Sewerproject@nantucket-ma.gov
Answers and/or comments will appear in future volumes of
this newsletter and/or addressed at Board of Selectmen meetings.*

COMMENT / QUESTION CORNER

All are welcome and encouraged to attend.

The Board of Selectmen will be holding workshop meetings on the Wastewater Plan on Wednesday, February 10, 2016 and Wednesday, March 9, 2016 at 6:00 PM in the first floor Community Room of the Public Safety Facility, 4 Fairgrounds Road. The meetings will be broadcast live on NCTV18 and can also be viewed online at <http://nantucket-ma.gov/363/Video-On-Demand>

FEBRUARY
&
MARCH 2016

WHAT'S NEXT?

Local

Postal Patron

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Volume 1
February 2016

Photo credit: Joe Costa

TOWN OF NANTUCKET BOARD OF SELECTMEN

Wastewater Plan Update

Nantucket

Wastewater Management Plan Update

Comprehensive Wastewater Management Plan (CWMP) Update Complete

The CWMP Update is complete and the Town now has a state approved 20-year wastewater plan. The major goal of the CWMP Update was to measure how clean our waters are and develop a solution to address water quality Island-wide.

We can tell how healthy our harbors, streams, ponds, creeks and estuaries are by the creatures that live there. Decades of studies by scientists looked at our waters and their environments in order to determine how healthy they are and what creatures and plants depend on the waters and their habitats. One example, in Nantucket and Polpis Harbors, are scallops that depend on eelgrass to thrive. If eelgrass is dying because of pollution in the water, then the scallops cannot survive. If the scallops cannot survive, then the scalloping industry will not survive. It is a domino effect.



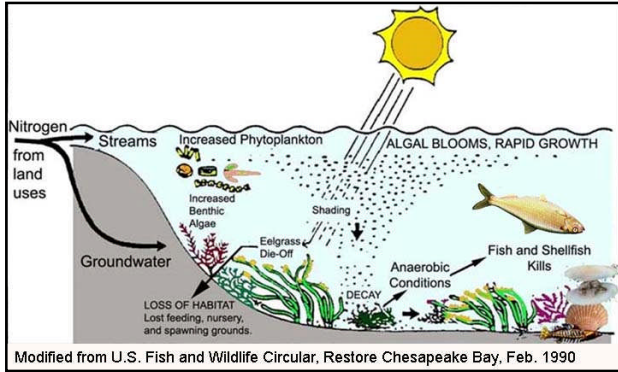
In nitrogen enriched waters, eelgrass is increasingly covered by algae ;left: healthy eel grass (right). Photo credit: Joe Costa.



Polluting of our water resources impacts us all. Nantucket depends on its water resources for drinking water, public health, tourism, fishing, boating, swimming, recreation, livelihoods and sole source sustainability. These water resources help make Nantucket unique and special.

This newsletter is the first of a series of public outreach efforts to help you understand what this pollution is, what is causing it, how we can control it, at what cost, and how we can all play a part to help. The CWMP Update examined the science and engineering and developed a plan to end this pollution. We are moving forward to implement this plan and need your support. **The Board of Selectmen and Town Administration are committed to preserving and protecting Nantucket's water resources.**

WHAT IS CAUSING THE POLLUTION? A major cause is nitrogen. Nitrogen is in our septic systems, fertilizers and stormwater. All of these drain into our groundwater, which then flows into our harbors, ponds, streams and estuaries carrying the pollution with it. One cause and effect of too



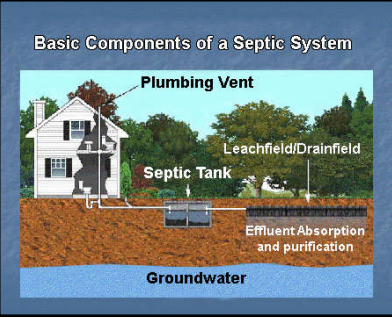
much nitrogen is that it produces excessive algae blooms, which limits sunlight through the water and kills off eel grass in the Harbors, which is impacting scalloping, as well as many other environmental resources.

Nitrogen pollution reduces the quality of our waters, which will impact recreational uses, the environment, public health and potentially our drinking water. Overuse of fertilizer, roadway and rooftop runoff from storms and septic systems

that leach into the ground are the largest contributors to this pollution that as a community we CAN control. Plans to eliminate or lessen these impacts to our environment are contained in the CWMP Update.

HOW CAN WE STOP THE POLLUTION?

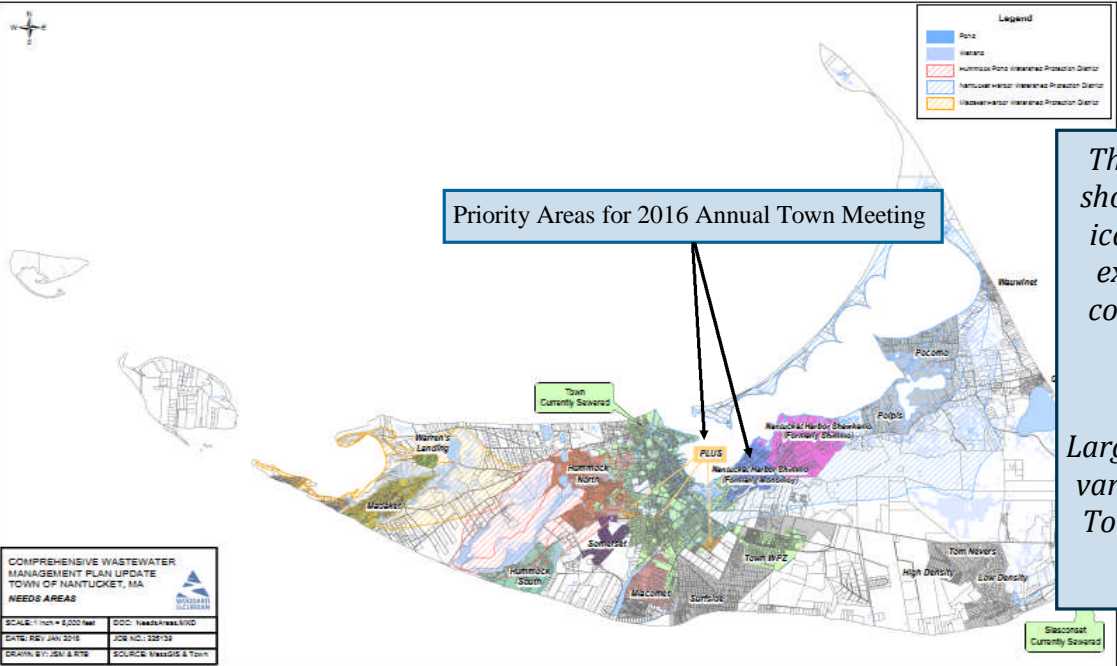
The CWMP Update outlines plans to extend sewer, manage/reduce fertilizer use and contain stormwater where possible in order to stop the flow of harmful nutrients.



Sewer
Septic systems are the largest contributor to the nitrogen pollution that we have the ability to control. Removing septic systems eliminates the pollutants from entering the groundwater and thus provides protection of our water resources in multiple ways. Removing wastewater from entering the groundwater eliminates risk to nearby drinking water supplies, protects the public health from potential contamination, protects pollution from environmental areas nearby, as well as protects our water resources from pollution by nutrients like nitrogen.



We can extend municipal sewer in areas determined to be at risk with resource pollution. We have room to treat additional wastewater at the Surfside Wastewater Treatment Facility (WWTF). The WWTF is able to discharge thoroughly cleaned water to the ground in the existing sand beds. This is a “highest and best use” of a facility we currently own and operate, so it makes sound financial sense to use it to its full capacity. The Town received approval from the MassDEP to sewer all areas from the CWMP Update Report shown as needing an off site wastewater solution. The map below shows the nine geographic areas (colored and labeled) proposed for future sewer. Gray areas stay on septic.



Fertilizer

The Town developed and implemented fertilizer regulations, Board of Health Local Regulation 75.00, to manage fertilizer use Island wide. The Natural Resources Department took the lead with implementing the regulations, working to develop and complete educational sessions, as well as bringing the process of licensing the landscapers to fruition. All of this work is ongoing and being enforced, specifically in areas where the science is telling us that overuse is impacting our water resources. Continuing to reduce fertilizer overuse by incorporating the guidelines developed in the Town’s *Best Management Practices for Landscape Fertilizer Use on Nantucket* will contribute towards eliminating another source of excessive nitrogen pollution from our waters.

Stormwater

Work with stormwater is ongoing, especially in the Town area along Nantucket Harbor. The DPW regularly sweeps streets and cleans catch basins to keep runoff from entering the water resources. Town drainage projects include addressing runoff into the water that happens with undersized pipes and existing outfall pipes that contribute to pollution.



Managing wastewater, fertilizer use, as well as stormwater, reduces the pollutants going in to our waters.

“The purpose of the *BEST MANAGEMENT PRACTICES FOR NANTUCKET [BMP]* is to provide science based guidelines for fertilizer use and other landscape practices that, when followed, reduce the loss of soil nutrients from excessive, incorrectly timed, or inappropriate fertilizers. On Nantucket, lost nutrients find their way rapidly to the coastal waters, harbors, ponds, and streams where they may cause contamination that is harmful to aquatic organisms as well as to human health and welfare.”
Excerpt from
Best Management Practices for
Landscape Fertilizer Use on
Nantucket Island
Prepared by the Article 68 Work Group
2010–2012

DESIGN / CONSTRUCTION
COST ESTIMATES

Nantucket Harbor Shimmo (2017 Costs)

Design - \$2,782,916
Construction - \$25,046,246

PLUS (2019 Costs)

Design - \$1,309,821
Construction - \$11,788,385

currently at 2 percent. The Town will then be able to finance the cost to the property owner under a Betterment Program, with payments made over 20 or 30 years. With an interest rate of zero percent, the Town is able to maintain the lowest possible end user costs. While we understand that these costs are high, our goal is to provide a mechanism to repay individual costs at the lowest possible terms.

The two Needs Areas proposed for sewer extension at the 2016 Annual Town Meeting are shown on the map on page 2 and in the box above. The current schedule for sewerage proposes Nantucket Harbor Shimmo (formerly shown as “Monomoy” and encompassing Brewster Road to the southwest to Gardner Road on the northeast and Kelley Road to the south to the Harbor) as the first area constructed with a planned start date in 2017. PLUS (larger neighborhood in-fill areas within or adjacent to the existing Town Sewer District) is proposed to follow in 2019. The April 2016 Annual Town Meeting will ask voters to approve moving forward with this plan.

Estimated planning costs shown in the box above include both project design and construction costs. Once the Town begins the design process, these estimates will be refined, with more accurate costs arrived at during the actual project bidding.

Capital costs apportioned to the property owner can be paid by the assessment of betterments. A betterment is a special property tax typically used by municipalities to recover the cost of a public improvement, such as sewer. The method under which betterment assessments will be made is under discussion now and will be explained in upcoming public meetings and publication of materials to the public and affected property owners in advance of the 2016 Annual Town Meeting. The Board is further refining how much to assess property owners receiving sewer and how much goes on the general tax base. The betterment is typically assessed when the sewer is operational, but in some cases an *Estimated Betterment* is assessed when the project is at 50 percent completion in order to cover borrowing costs to the Town. There is a 20-30 year pay back term on betterments, which the Town can set up as payment plans with each property owner on the same schedule as property taxes. The property owner can also choose to pay all at once.

The Board of Selectmen is planning to hold public meetings to explain all cost information in greater detail.

WHAT IF WE CHOOSE TO DO NOTHING?

The science and engineering is telling us that several factors are contributing to polluting our water resources. There are many reports, which conclude that excessive nutrients, mainly nitrogen, from multiple sources are polluting our waters. **But, more importantly, we are SEEING the impacts!** With algae blooms, red tides, reduction of fish/ shellfish/eelgrass/plant life historically found in our waters, we can see that there are issues. What we cannot see until it is too late, is how this pollution has the potential to impact our drinking water, the fishing/shellfishing industry, the public health, our tourism, all of which can eventually impact our property values, not to mention the impact on Nantucket’s unique attributes.

The Massachusetts Department of Environmental Protection, (MassDEP) under the jurisdiction of the Environmental Protection Agency (EPA), is mandating that Nantucket eliminate the pollution of water resources and restore water quality to established standards. Both agencies approved the CWMP Update Plan and will work with the Town as it voluntarily works to achieve restoration of the waters.

The sewer plan is a major piece of the restoration process, along with stormwater management and fertilizer reduction. These are the items that we, as Nantucket residents, can control. Every individual contribution counts!

If the Town chooses NOT to do anything, MassDEP will issue orders, and together with fines, will mandate restoration under its terms and conditions.